



The Laboratory of Luisa de Vivo is seeking for **1 full time junior research fellow** (borsa di studio) to study brain circuit function across the fields of sleep and mental health.

What will you be doing?

You will receive training in some of the most used techniques in neuroscience, including brain probe implantation, behavioral tests, immunofluorescence, and molecular biology. You will also have the possibility to contribute intellectually to the ongoing research, produce reports of experiments and communicate findings at scientific meetings.

Qualifications and requirements

- Master's degree (awarded, we are open to people with a variety of backgrounds)
- Genuine interest in neuroscience and sleep
- Good communication skills and self-motivation
- Ability to work as part of a team
- Basic knowledge of written and spoken English
- Experience with rodent handling is an advantage

Offered contract: 12-month contract, renewable. Annual salary 19000 EUR. Preferable starting date: Spring 2022, negotiable.

For application details please enquire (<u>luisa.devivo@unicam.it</u>)

The scientific environment

The lab aims at understanding the role of sleep and the mechanisms that regulate it. One main line of research wants to address the role of sleep in promoting mental health. Sleep disturbances are comorbid with most neuropsychiatric disorders, often preceding disease onset by many years. However, it is not clear whether, and to which extent, sleep impairment is a causal factor of the disease. Our research aims to map the molecular, cellular, circuit and behavioural consequences of sleep impairment across the lifecycle and to characterize the interaction between sleep disruption and other environmental and genetic factors. The research goal is to use this knowledge to develop novel and personalized strategies of prevention and treatment of mental conditions. To this goal, we combine a variety of approaches, including in vivo recording of neuronal activity, neuromorphological studies of brain cells, molecular biology, and behavioral testing.

The lab explores also scientific questions linking sleep to glial cells, gut microbiome, cellular metabolism, adipose tissue, torpor, etc, thanks to the collaboration with other research groups within Unicam and outside. Some of the collaborators in Unicam include Prof. Roberto Ciccocioppo (addiciton), Prof. Michele Bellesi (sleep), Prof. Valerio Napolioni (epigenetics), Prof. Anna Maria Eleuteri (gut microbiome), Prof. Emanuela Merelli (computation).

The PI Luisa de Vivo is a neurobiologist passionate about synaptic plasticity and sleep. During her training, she gained experience in in vivo electrophysiology, imaging with confocal and two photon microscopy, mini-endoscopes and three-dimensional electron microscopy.

Complete list of publications can be found at

https://www.ncbi.nlm.nih.gov/pubmed/?term=de%20Vivo%20L%5BAuthor%5D&cauthor=true&cauthor_uid=31374117

For further information check https://armeniseharvard.org/scientists/luisa-de-vivo/

The University of Camerino (UNICAM)



Science and Technology.

UNICAM is a 'city campus university' chartered in 1336, with about 8,000 undergraduate students, and 180 PhD candidates, of which ~40% are foreigners. For a substantial number of programs in foreign languages and a high percentage of international students, UNICAM has been top rated for international orientation (2019 U-Multirank report). Moreover, UNICAM hosts the International School of Advanced Studies, responsible for coordinating interdisciplinary PhD programs that span upon the major key research areas of the University, including Life and Health Sciences, and



UNICAM has excellent research facilities including 1500 m² vivarium fully equipped for mouse and rat breeding, maintenance and behavioural testing, sleep monitoring and electrophysiology recordings, equipped histology labs, wet labs with all basic molecular biology and biochemistry equipment, light, confocal and electron microscopes.

UNICAM campus offers an interdisciplinary environment with experts in diverse fields of science, national and international collaborations with other universities and industry.

The campus offers also housing for students and excellent facilities for indoor and outdoor sports:



https://www.cuscamerino.it/

To know how to reach us, click here



Camerino is a small medieval town located in the Apennines bordering Umbria, between the valleys of the rivers Potenza and Chienti, about 64 kilometres (40 mi) from Ancona. Camerino, immersed among the Marchigian hills, is the perfect place for outdoor activities such as hiking and mountain bike riding.



Links to outdoor activities:

https://www.bandierearancioni.it/approfondimento/che-cosa-vedere-e-cosa-fare-camerino

https://camerinomeraviglia.it/

https://www.offroad.terredeivarano.it/percorsi

http://www.sibillinibikemap.it/

https://www.sibilliniweb.it/schede/itinerari-monti-sibillini/

https://www.frasassi.com/

